

Title (en)  
BEACON-AUGMENTED POSE ESTIMATION

Title (de)  
ERWEITERTE POSENSCHÄTZUNG MIT BAKEN

Title (fr)  
ESTIMATION DE POSES AMÉLIORÉE PAR BALISES

Publication  
**EP 2029970 B1 20160217 (EN)**

Application  
**EP 07783973 A 20070521**

Priority  
• US 2007069337 W 20070521  
• US 42007906 A 20060524

Abstract (en)  
[origin: US2007276590A1] A beacon-augmented pose estimation system includes positionable beacons that can determine their own 3-D geospatial coordinates and transmit those coordinates back to the pose object. An imaging sensor images the field-of-view of the pose object to provide 2-D image coordinates for any of the beacons in the FOV. A pose object controller processes the sets of 3-D geospatial coordinates and 2-D image coordinates to refine a pose estimate of the pose object. The positionable beacons may include both static beacons that are pre-positioned and mobile beacons that are command-guided to position themselves in the pose object's likely or actual FOV.

IPC 8 full level  
**G01C 21/20** (2006.01); **G01C 21/00** (2006.01); **G01S 5/16** (2006.01); **G01S 19/18** (2010.01)

CPC (source: EP US)  
**G01C 21/005** (2013.01 - EP US); **G01C 21/20** (2013.01 - EP US); **G01S 5/16** (2013.01 - EP US); **G01S 19/18** (2013.01 - EP US)

Citation (examination)  
RONALD AZUMA ET AL: "Performance analysis of an outdoor augmented reality tracking system that relies upon a few mobile beacons", MIXED AND AUGMENTED REALITY, 2006. ISMAR 2006. IEEE/ACM INTERNATIONAL SYMPOSIUM ON, pages 101 - 104, XP058033347, ISBN: 978-1-4244-0650-0, DOI: 10.1109/ISMAR.2006.297798

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**US 2007276590 A1 20071129; US 7599789 B2 20091006**; EP 2029970 A2 20090304; EP 2029970 A4 20120926; EP 2029970 B1 20160217; WO 2007140155 A2 20071206; WO 2007140155 A3 20080912

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